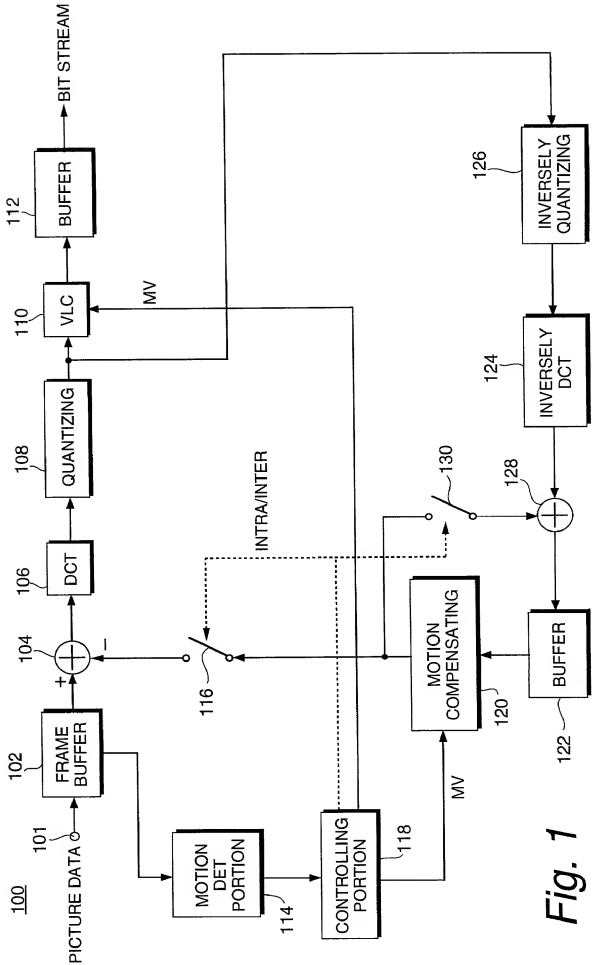
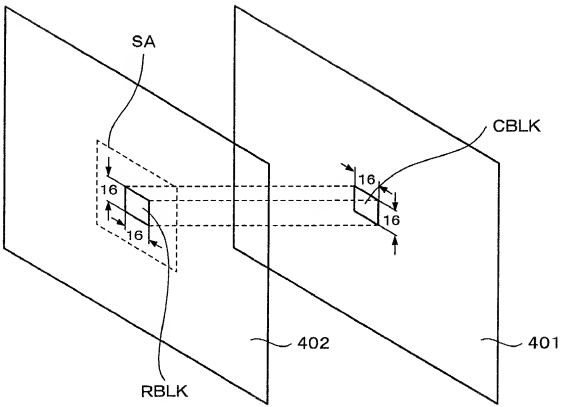


Fig. 1

T02240 "5908660

09960065 .072301

Fig. 2



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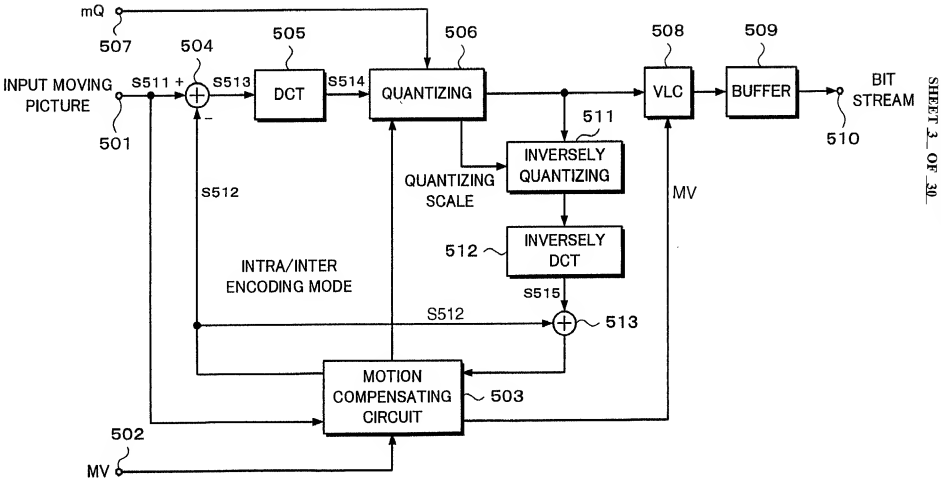
099100S5.072301

Fig. 3



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TOE270 S9007060

Fig. 4

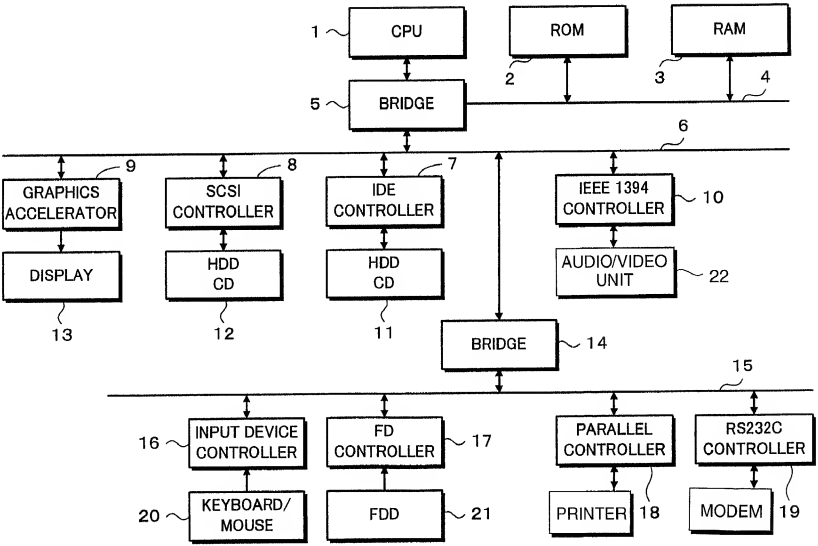

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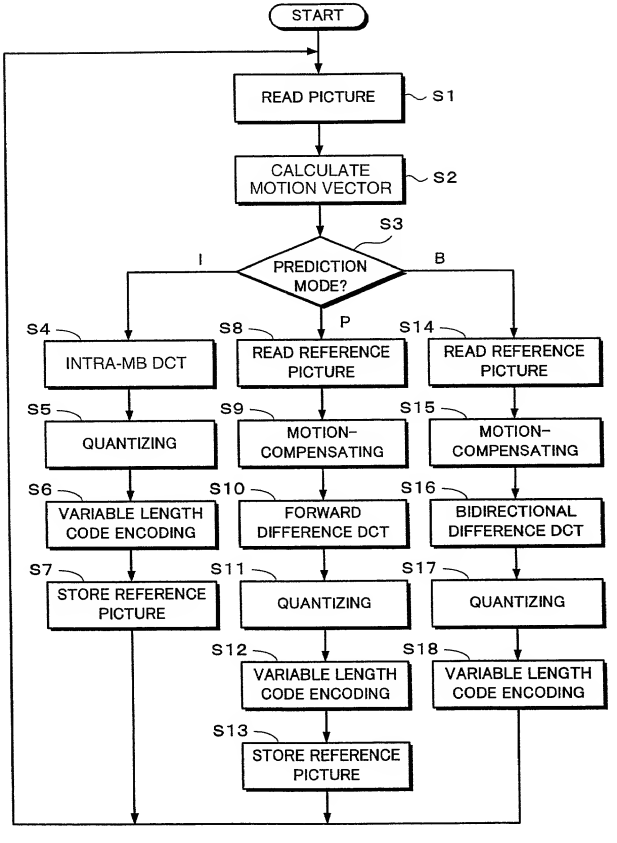
Fig. 5



TOE240 "59001060

EP 2 270 809 A1

Fig. 6

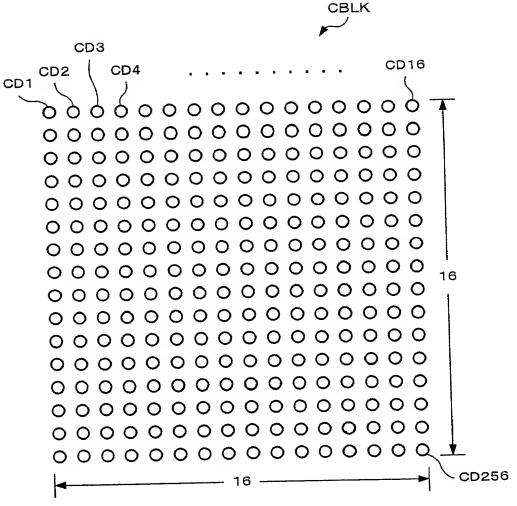


Fig. 7

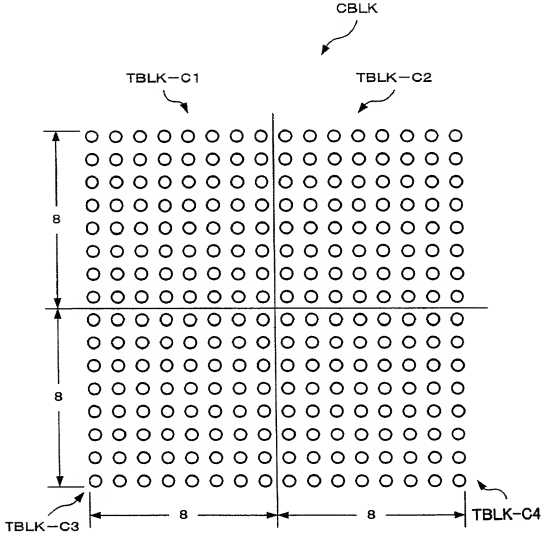


Fig. 8

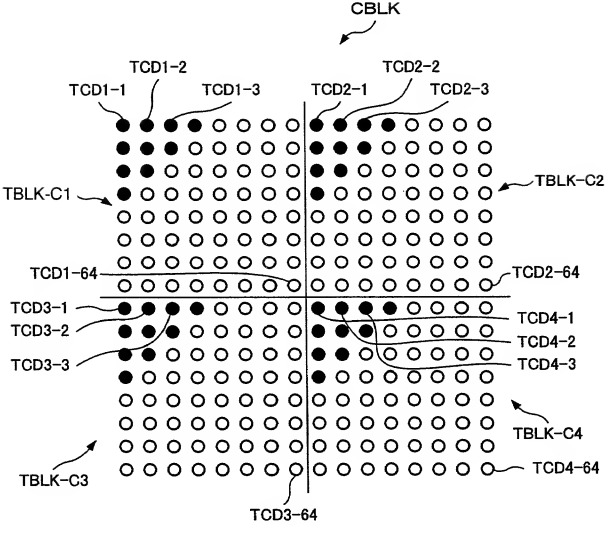
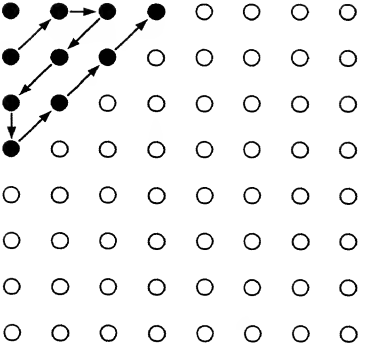

CBLK
TCD1-2
TCD2-2
TCD1-1
TCD1-3
TCD2-1
TCD2-3
TBLK-C1
TBLK-C2
TCD1-64
TCD2-64
TCD3-1
TCD3-2
TCD3-3
TCD4-1
TCD4-2
TCD4-3
TBLK-C4
TBLK-C3
TCD4-64
TCD3-64

Fig. 9



EFS-Web 2.0.1 Sep 05 2008 09:14:08

Fig. 10

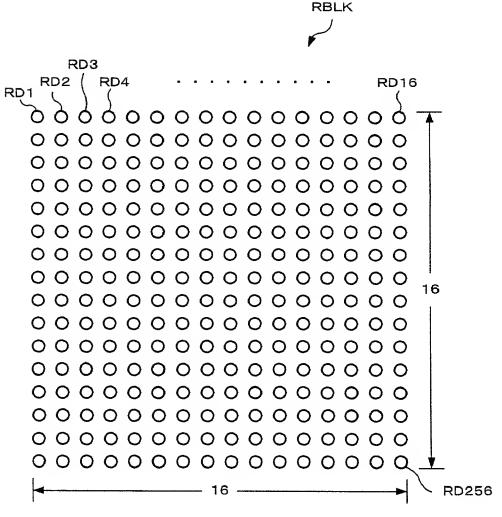


Fig. 11

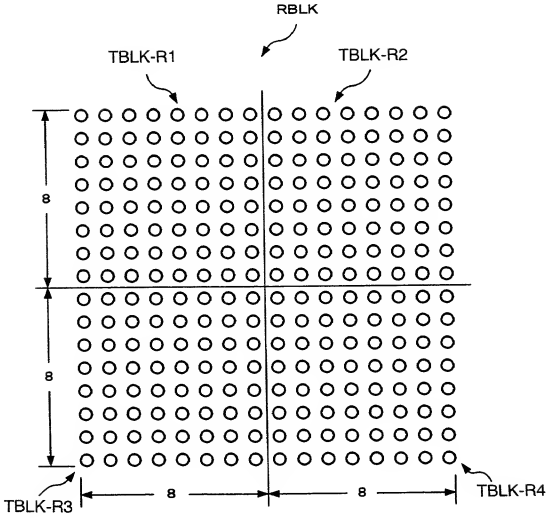


FIG 12 - 5901668

Fig. 12

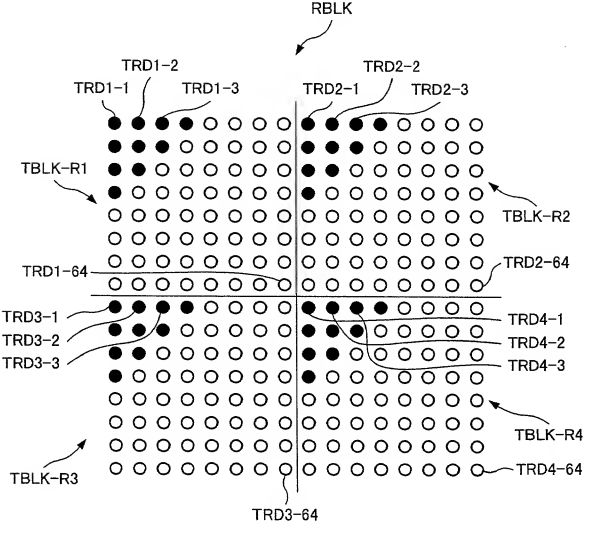


Fig. 13

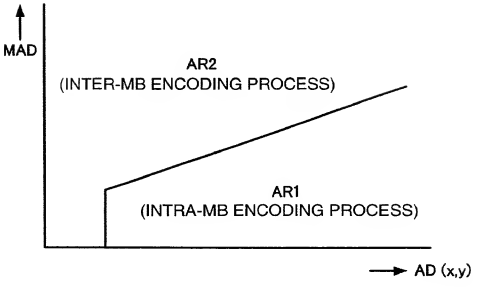

MAD
AR2
(INTER-MB ENCODING PROCESS)
AR1
(INTRA-MB ENCODING PROCESS)
AD (x,y)

Fig. 14

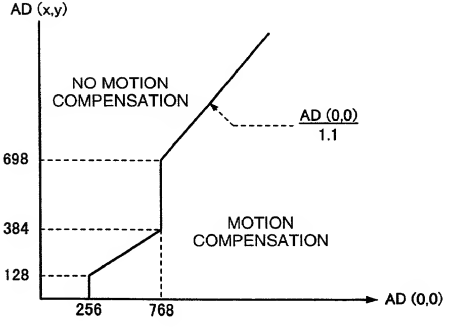
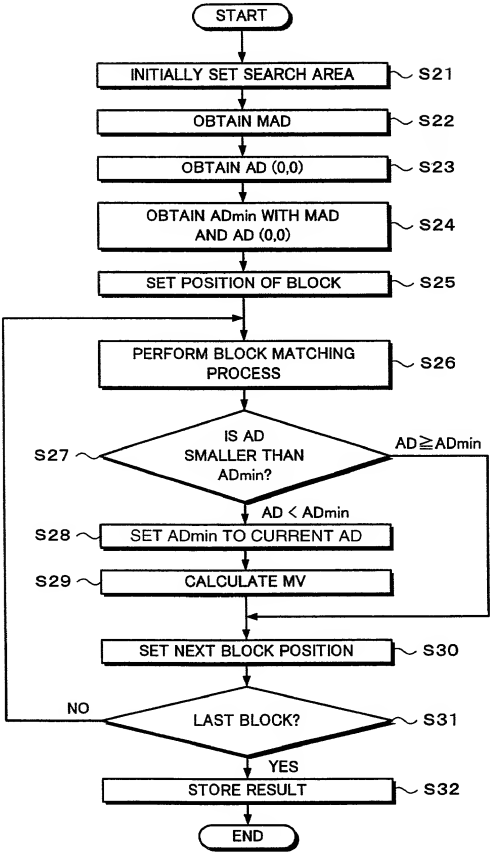
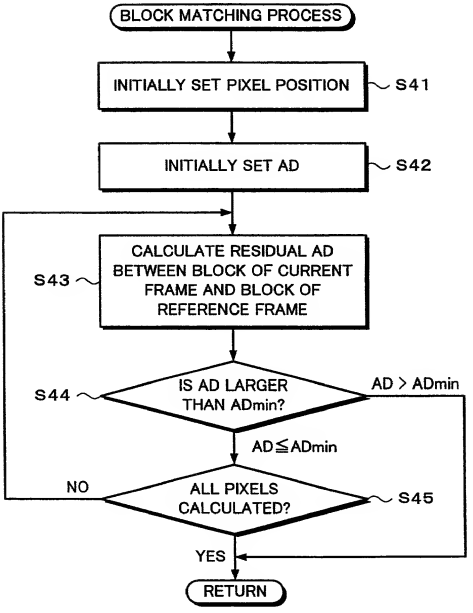

AD (x,y)
NO MOTION
COMPENSATION
AD (0,0)
1.1
698
384
MOTION
COMPENSATION
128
256
768
AD (0,0)

Fig. 15



09914065 - 050204

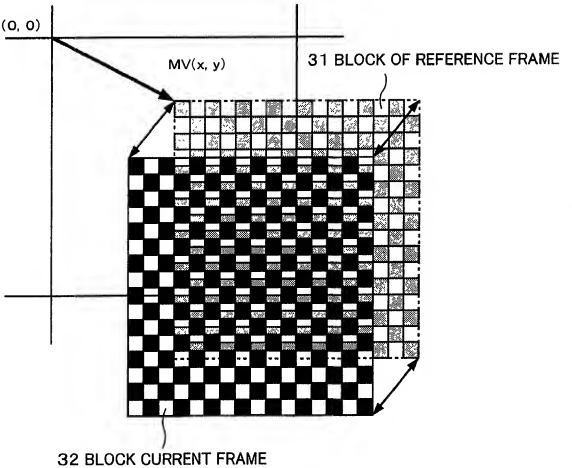
Fig. 16



09210805 "072204

09910065 .072301

Fig. 17



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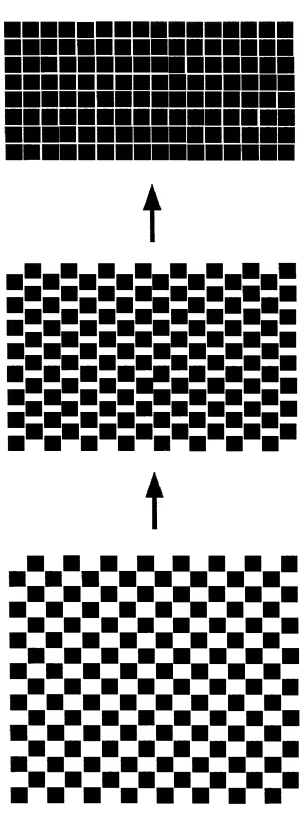


10/22/07 09908065 07230101

FIG.20 Sample

Fig. 19A

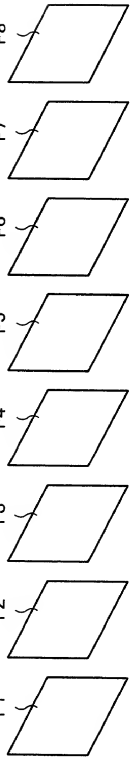


Fig. 19B

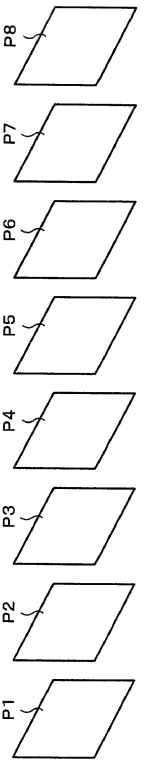
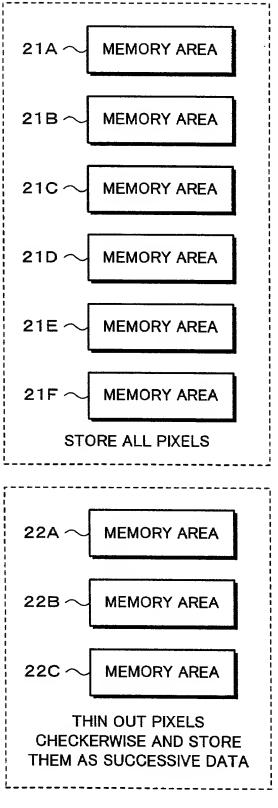


Fig. 20


21A
MEMORY AREA
21B
MEMORY AREA
21C
MEMORY AREA
21D
MEMORY AREA
21E
MEMORY AREA
21F
MEMORY AREA
STORE ALL PIXELS
22A
MEMORY AREA
22B
MEMORY AREA
22C
MEMORY AREA
THIN OUT PIXELS
CHECKERWISE AND STORE
THEM AS SUCCESSIVE DATA

EP02270599001660

Fig. 21

TIME POINT	T1	T2	T3	T4	T5	T6	T7	T8	T9
MEMORY AREA 21A	F1	F1	F1	F1	F1	F1	F7	F7	F7
MEMORY AREA 21B		F2	F2	F2	F2	F2	F2	F8	F8
MEMORY AREA 21C			F3	F3	F3	F3	F3	F3	F9
MEMORY AREA 21D				F4	F4	F4	F4	F4	F4
MEMORY AREA 21E					F5	F5	F5	F5	F5
MEMORY AREA 21F						F6	F6	F6	F6
MEMORY AREA 22A				f1	f1	f1	f7	f7	f7
MEMORY AREA 22B				f4	f4	f4	f4	f4	f4
MEMORY AREA 22C					f2	f3	f3	f5	f6
OPERATION	ENCODE P1			ENCODE P4	ENCODE P2	ENCODE P3	ENCODE P7	ENCODE P5	ENCODE P6

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Fig. 22

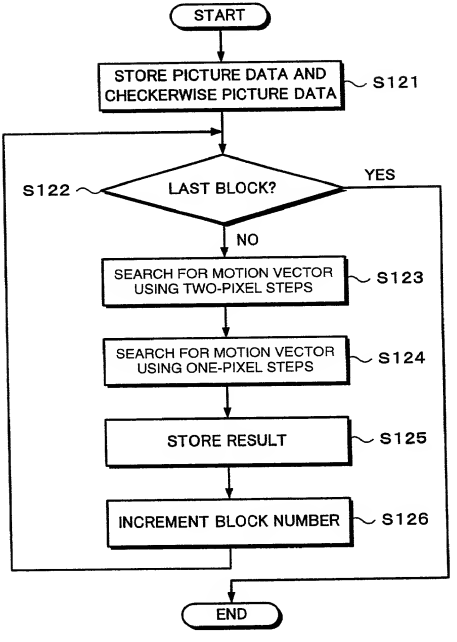
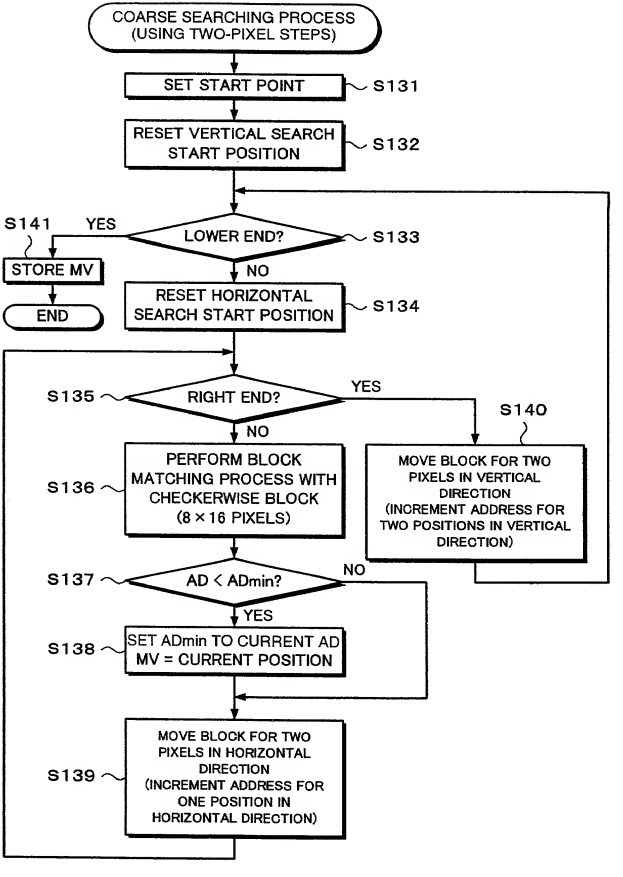
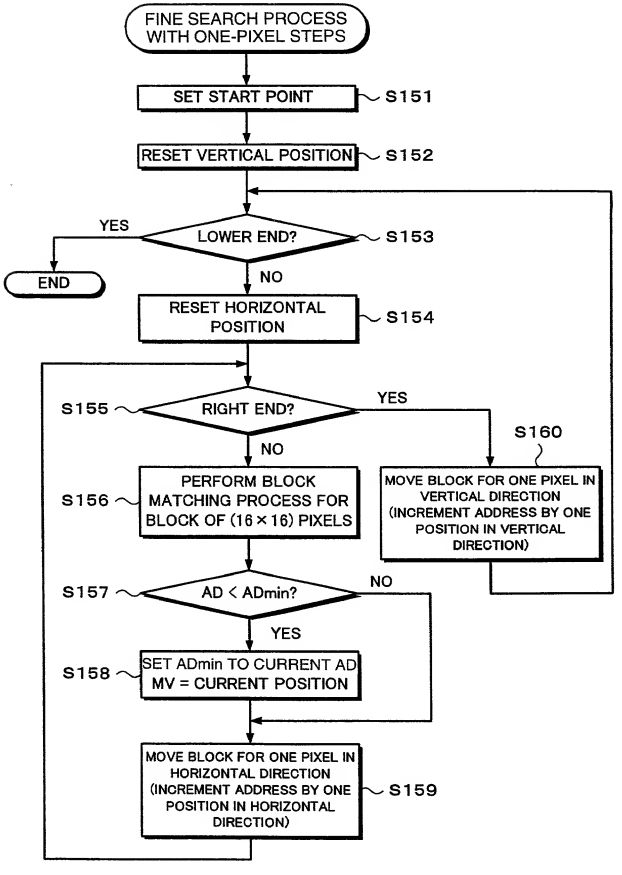

START
STORE PICTURE DATA AND CHECKERWISE PICTURE DATA
S121
S122
LAST BLOCK?
YES
NO
SEARCH FOR MOTION VECTOR USING TWO-PIXEL STEPS
S123
SEARCH FOR MOTION VECTOR USING ONE-PIXEL STEPS
S124
STORE RESULT
S125
INCREMENT BLOCK NUMBER
S126
END

Fig. 23



US20060056707A1

Fig. 24


FINE SEARCH PROCESS WITH ONE-PIXEL STEPS
SET START POINT
S151
RESET VERTICAL POSITION
S152
YES
LOWER END?
S153
END
NO
RESET HORIZONTAL POSITION
S154
S155
RIGHT END?
YES
S160
NO
S156
PERFORM BLOCK MATCHING PROCESS FOR BLOCK OF (16×16) PIXELS
MOVE BLOCK FOR ONE PIXEL IN VERTICAL DIRECTION (INCREMENT ADDRESS BY ONE POSITION IN VERTICAL DIRECTION)
S157
AD < ADmin?
NO
YES
S158
SET ADmin TO CURRENT AD
MV = CURRENT POSITION
MOVE BLOCK FOR ONE PIXEL IN HORIZONTAL DIRECTION (INCREMENT ADDRESS BY ONE POSITION IN HORIZONTAL DIRECTION)
S159

TOE2Z0*S900T660

Fig. 25

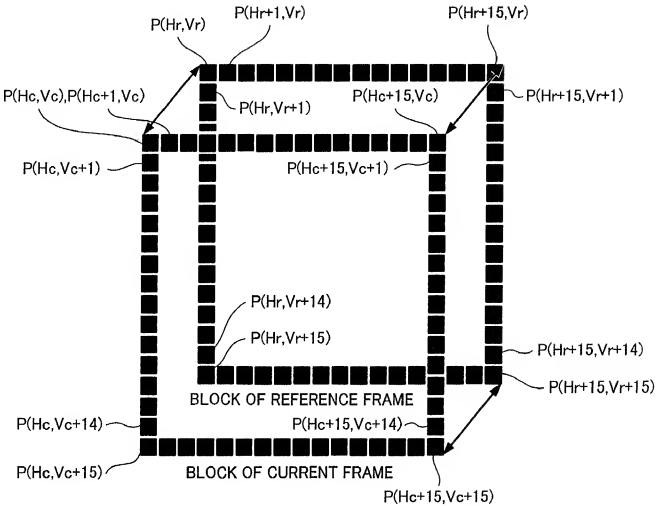


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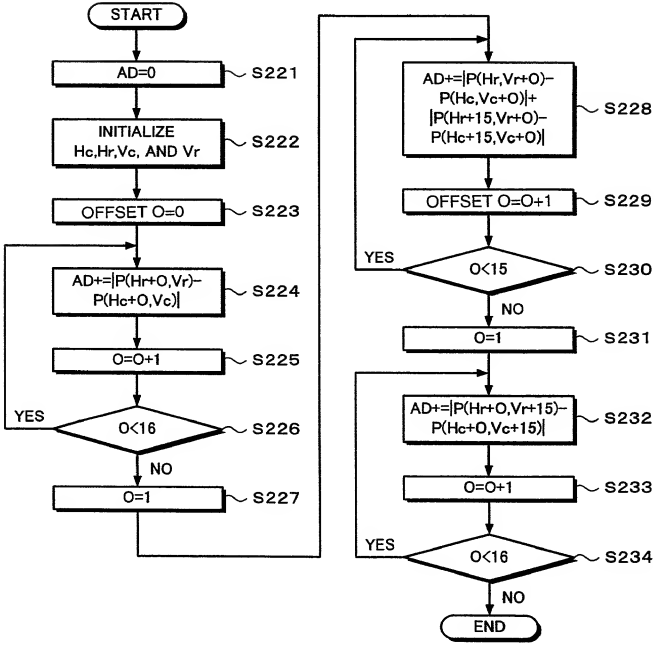
Fig. 26


START
AD=0
S221
INITIALIZE Hc,Hr,Vc, AND Vr
S222
OFFSET O=0
S223
AD+=|P(Hr+O,Vr)-P(Hc+O,Vc)|
S224
O=O+1
S225
YES
O<16
S226
NO
O=1
S227
AD+=|P(Hr,Vr+O)-P(Hc,Vc+O)|+|P(Hr+15,Vr+O)-P(Hc+15,Vc+O)|
S228
OFFSET O=O+1
S229
YES
O<15
S230
NO
O=1
S231
AD+=|P(Hr+O,Vr+15)-P(Hc+O,Vc+15)|
S232
O=O+1
S233
YES
O<16
S234
NO
END

09910065 "072304

Fig. 27

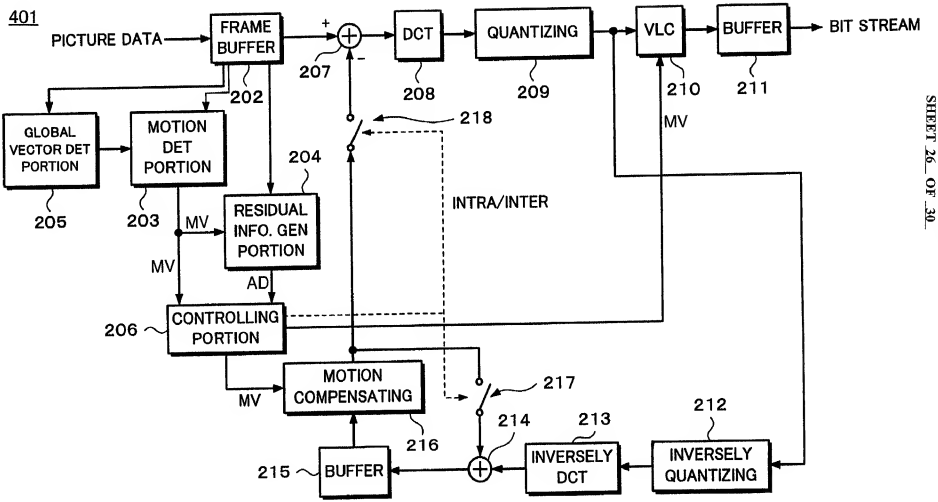


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Fig. 28

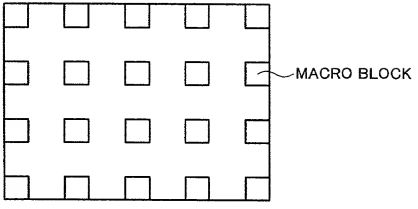
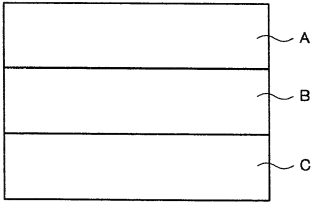


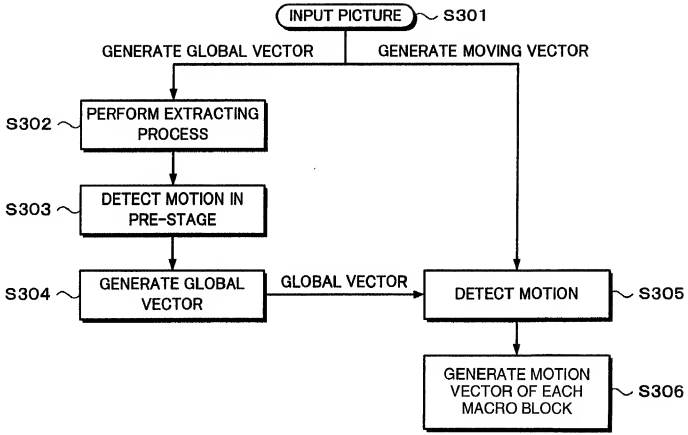
Fig. 29



09941005 -072201

TOE2LD" S90DT66D

Fig. 30



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T0E270'S9007660

Fig. 31

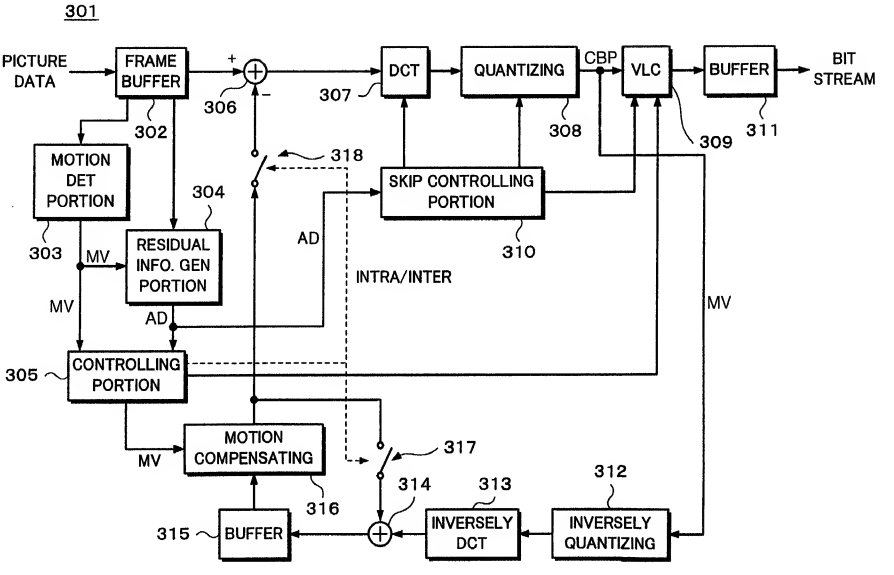

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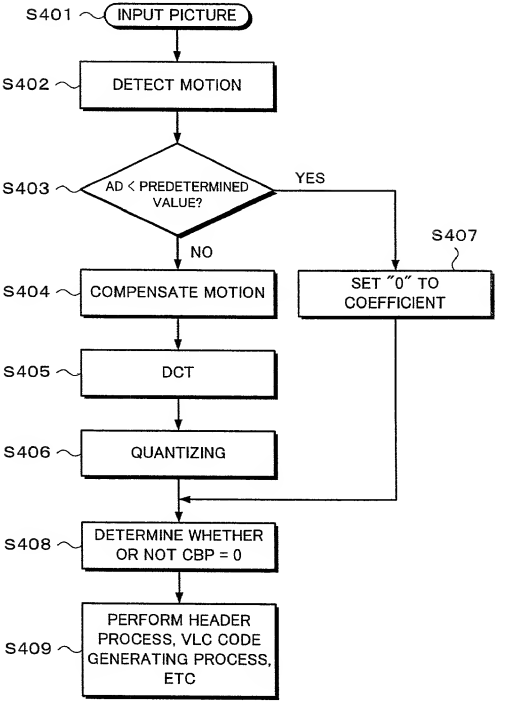
Fig. 32


S401
INPUT PICTURE
S402
DETECT MOTION
S403
AD < PREDETERMINED VALUE?
YES
NO
S407
SET "0" TO COEFFICIENT
S404
COMPENSATE MOTION
S405
DCT
S406
QUANTIZING
S408
DETERMINE WHETHER OR NOT CBP = 0
S409
PERFORM HEADER PROCESS, VLC CODE GENERATING PROCESS, ETC